

### REMARKS

Applicants respectfully request reconsideration and allowance of the above-identified patent application. In this paper, claims 17-21, 23, 24, 26-28, 30-32 and 41-44 remain pending in the application, wherein claims 17, 20, and 26 have been amended, claims 1-16, and 33-35 have been cancelled, and claims 30 and 31 have been canceled.<sup>1</sup>

Initially Applicants and Applicants' attorney express appreciation to the Examiner for the courtesies extended during the recent interview held on August 24, 2005. The claim amendments and arguments submitted in this paper are consistent with the amendments and arguments presented during the course of the interview.<sup>2</sup>

Applicants also note with appreciation the Examiner's consideration of the documents submitted with the Information Disclosure Statement (IDS) filed on January, 28, 2005. Further, Applicants note with appreciation the Examiner's recognition of the typographical error in Applicants previous communication that periodically referenced to claim 21, when the actual claim referred to should have been claim 20.

In the third paragraph of the Office Action, all of the independent claims (17, 20, and 26) have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,202,211 to Williams, Jr. ("*Williams*") in view of Richardson, et al., "*Virtual Network Computing*," IEEE Internet Computing, January-February 1998, pp. 33-38 ("*Richardson*"). The remaining dependent claims were also rejected as allegedly being unpatentable over *Williams* in view of *Richardson*.<sup>3</sup> Applicants respectfully traverse these grounds of rejection.

As discussed during the interview, Applicants' invention generally relates to a remote computing server system that includes a server that provides remote client access to program(s) that are run at the server, wherein the server converts display commands generated from the program(s) into compressed video streams for transmission to the remote client(s). As recited in

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<sup>1</sup> Support for the claim amendments can be found throughout the Specification, including ¶¶ [027], [0143]-[0153], [0166], [0183], [0204], [0241]-[0246], and [0256].

<sup>2</sup> Applicants also note for the record (as discussed in the interview) that this case is part of a family of cases including the following application serial numbers: 09/770,769; 09/770,644; 09/770,767; 09/770,765; 09/770,766; 10/975,693; 10/976,063; 09/744,771; and 09/744,662. In order to preserve any and all rights available to Applicants, Applicants will not provide a terminal disclaimer with reference to any of the aforementioned cases at this time. Nevertheless, one or more terminal disclaimers may be provided in the future if the Examiner deems it necessary.

<sup>3</sup> Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to do so in the future. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status or asserted teachings of the cited art.

claim 17, e.g., the claimed embodiment provides that the remote computing server system includes: a server, executing a plurality of programs, each of which generates a set of display commands which represent a user interface for each of said plurality of programs; a degradation module for degrading the plurality of sets of display commands responsive to transmission bandwidth limitations that are identified by the server; a video compressor which receives the degraded plurality of sets of display commands from the degradation module and generates a compressed video stream from each one of said sets; and a transmitter for the transmission of the plurality of compressed video streams to one or more remote locations.

The embodiment recited in independent method claim 20 is directed toward a method for compressing video transmission of display commands representing user interfaces for various programs, wherein the transmission of the compressed video to remote clients occurs from a remote computing server that runs the various programs. The method includes: executing, at a server computer, a plurality of programs, each of said programs generating a set of display commands responsive to an Internet connection for a client that is remote from the server, the set of display commands representing a user interface for the Internet connection; identifying a bandwidth limitation corresponding to a network connection between the server computer and client; degrading said set of display commands responsive to transmission bandwidth limitations, wherein said degradation of said set of display commands is performed prior to compressing said degraded sets of display commands into video streams; and transmitting each of said degraded sets of display commands to one or more different remote locations, wherein said degraded sets of display commands are transmitted as compressed video streams.

Applicants' invention, as recited for example in independent apparatus claim 26 relates to a multi-headed display generator at a remote server for generating a set of display commands representing user interfaces for various programs, which will be compressed and transmitted as compressed video to remote clients. The remote computing server system comprising: at least one CPU running at least one program, each of said programs generating at least one set of display commands, wherein said programs generate in totality at least two sets of content independent display commands; a degradation module for degrading at least one of the two sets of content independent display commands prior to compression, and wherein the degradation module trades off the degradation of one of the two sets with the other; and at least one compressor which converts said two sets of display commands into two simultaneous

compressed video streams, wherein based on the degradation of the at least one of the two sets of content independent display commands said generator trades off the compression of one set of display commands with the compression of a second set of display commands, and wherein said compression of the said sets utilizes at least one shared resource of said generator.

As discussed and generally agreed to during the interview, the combination of *Williams* and *Richardson* does not render claims 17, 20, and 26 unpatentable for at least the reason that the combination does not disclose or suggest all of the features of these claims.<sup>4</sup> For example, the combination of *Williams* and *Richards*—taken either individually or as a whole—does not disclose or suggest degrading display commands prior to compression into video streams. As such, the combination of *Williams* and *Richardson* does not disclose or suggest: (1) a degradation module for degrading a plurality of sets of display commands responsive to transmission bandwidth limitations that are identified by the server, and a video compressor which receives the degraded plurality of sets of display commands from the degradation module and generates a compressed video steam from each one of the sets as recited, *inter alia*, in claim 17; and (2) identifying a bandwidth limitation corresponding to a network connection between the server computer and client, and degrading the set of display commands responsive to transmission bandwidth limitations, wherein the degradation of the set of display commands is performed prior to compressing the degraded sets of display commands into video streams, as recited, *inter alia*, in claim 20; and (3) a degradation module for degrading at least one of two sets of content independent display commands prior to compression, and wherein the degradation module trades off the degradation of one of the two sets with the other, as recited, *inter alia*, in claim 26.

In contrast to the present invention, *Williams* discloses enabling multiple users to concurrently access a PC-based server in a home local area network using conventional TVs as display devices. Although *Williams* discloses modulating desktop data at a server onto a video channel that is transmitted to a client, *Williams* is silent with regards to video compression (as acknowledged by the Officer Action) and does not disclose or suggest degrading display commands in response to transmission bandwidth limitations prior to modulating such data onto

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<sup>4</sup> In order to establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143 (emphasis added). During examination, the pending claims are given their broadest reasonable interpretation, i.e., they are interpreted as broadly as their terms reasonably allow, consistent with the specification. MPEP §§ 2111 & 2111.01.

the video channel. Recognizing some of the deficiencies of *Williams*, the Office Action cites *Richardson*.

*Richardson* discloses a virtual network computing environment based on a simple display protocol for accessing graphical user interfaces on virtually any device with some form of communications link (e.g., the set top box in *Williams*). Unlike *Williams*, *Richardson* provides for various video encoding schemes for rendering, on the display of a client, desktops and other applications generated at a server. *Richardson*, however, does not rectify those deficiencies noted above with regards to *Williams*. In particular, *Richardson* does not disclose or suggest degrading a set of display commands in response to transmission bandwidth limitations and *then* converting the degraded display commands into compressed video streams for transmission to various remote locations. Accordingly, *Richardson* does not rectify those deficiencies noted above with respect to *Williams*; and therefore Applicants respectfully submit that the combination of *William* and *Richardson*—taken either individually or as a whole—does not render independent claims, 17, 20, and 26 unpatentable. Indeed, as noted in the Interview Summary, the amendments proposed regarding the degradation and bandwidth limitations during the interview appear to overcome the cited art of record, meaning that a new search most likely will be needed.

Based on at least the foregoing reasons, Applicants respectfully submit that the cited prior art fails to make obvious Applicants' invention, as claimed for example, in independent claims 17, 20, and 26. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertion with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and notice to this effect is earnestly solicited. Should any question arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at +1.801.533.9800.

Dated this 2<sup>nd</sup> day of September, 2005.

Respectfully submitted,



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